

INTRODUCTION

Project overview:

Importing and securing data in a Service Now project involves loading data from various sources into Service Now and then ensuring its security. This process typically uses import sets, transform maps, and various security measures to protect sensitive information.

Purpose

Importing and securing data in a Service Now project aims to efficiently and safely load data into the platform, ensuring data integrity and protecting sensitive information. This involves using import sets to bring data from various sources into Service Now, mapping it to target tables, and implementing security measures to control access and prevent unauthorized modifications.

IDEATIONPHASE

Problem statement:

Linking each record to an employee and pulling some employee details (like department) into the record for easier reporting

Challenges:

Import data needs to be accurate and consistent across different sources

Different systems of in have different data structures and formats

Objectives:

Using service now’s built in security features

Implementing data validation and cleansing

REQUIREMENT ANALYSIS

Solution requirement (functional & Non functional)

Team ID LTVIP2025TMID30683

Project Name importing & securing data in service now

Functional Requirements:

Following are the functional requirements of the proposed solution

FR NO.	Functional requirements.	Sub requirements
FR-1.	Tables.	Create table
FR-2.	Importing data.	Importing data Map fields
FR-3.	Using Dot walking to Access employee Department information	Dot walking
FR-4.	Access control list (ACL).	Creating an ACL
FR-5.	Roles.	Creating role Update elevate Role
FR-6.	Result.	Testing results

Non functional requirements

Following are the non fiction requirements of the proposed solution

NFR NO.	Non. Functional Requirements	Description
NFR-1.	Usability.	Answer the data Import interface is . User friendly
NFR-2.	Security.	Define who can Access modified or Importing data
NFR-3.	Reliability	Define how Data Integrity will be main Tained during import
NFR-4.	Performance.	Define acceptable Response times for Data import process
NFR-5.	Availability.	Implement Comprehensive Logging
NFR-6.	Scalability.	And so the system can Handle

Data flow diagram



Tables



Import data



Using dot walking to access employee
department information



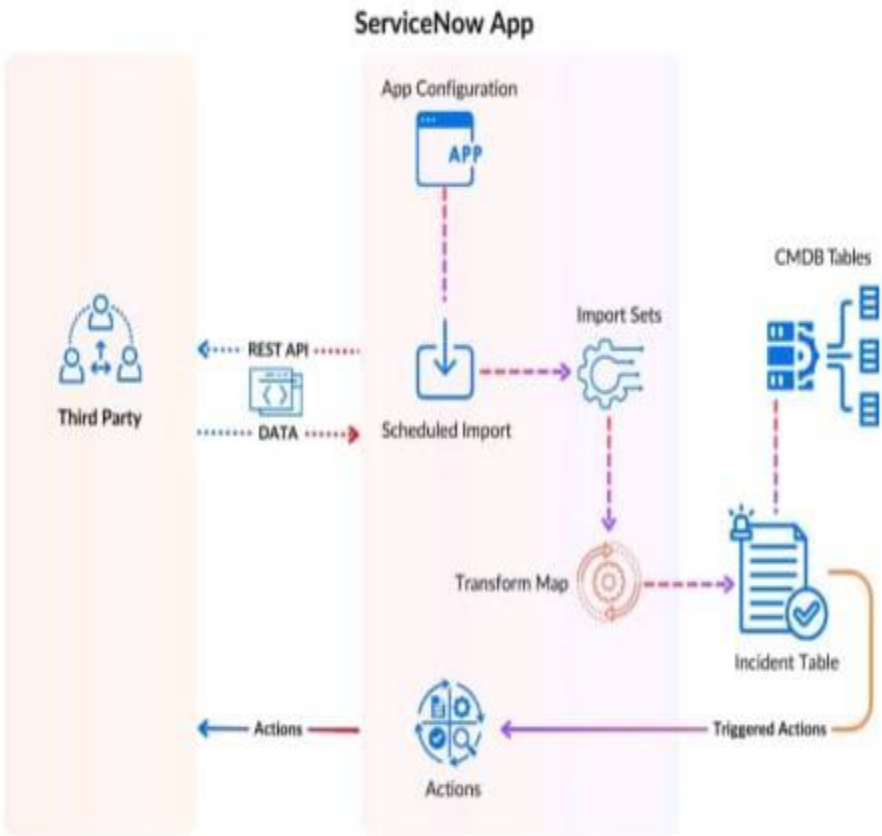
Access control list (ACL)



Roles

Result

Technology stack



Technology Stack: The image shows how data flows from a third-party system into the Service Now app, gets processed through import mechanisms, and ends up in the Incident Table, where it can trigger further actions or updates.

Third Party → REST API → Service Now

Data is sent from a third-party system via REST API.

REST API → Scheduled Import

API data is captured by a scheduled import job.

Scheduled Import → Import Sets

Data is loaded into temporary import tables.

Import Sets → Transform Map

Data is transformed to match the format of the target tables.

Transform Map → Incident Table

Transformed data is saved as incidents in Service Now.

Incident Table → Triggered Actions

Actions (like alerts, updates) are automatically triggered.

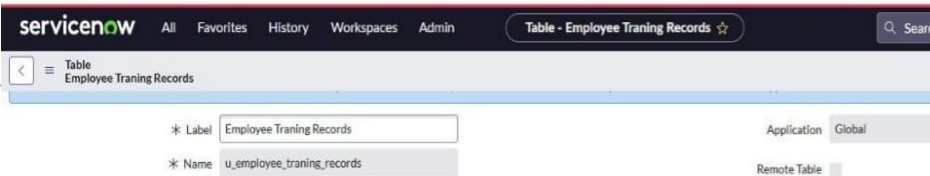
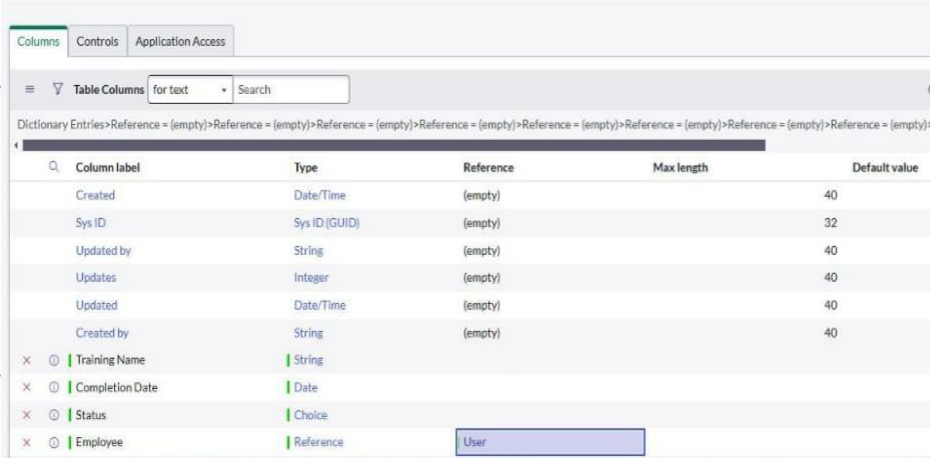
Incident Table ↔ CMDB Tables

Incidents are linked to Configuration Items (Cis) from the CMDB.

PROJECT DESIGN

Proposed solution template

Project team shall fill the following information in the proposal solution template

S No	Parameters	Description
1.	Problem statement	Linking each record to an employee and pulling some employee details (like department) into the record for easier reporting
2.	Ideal / solution description	Multi step process using important maps for data loading combined with robot security measures
3.		
4.		
5.	Model	to use service now and that includes the ability to import data from various source
6.	Scalability of the solution	Service now can handle growing that of volumes and maintain Data integrity and confidently

Milestone 1: tables

Steps:

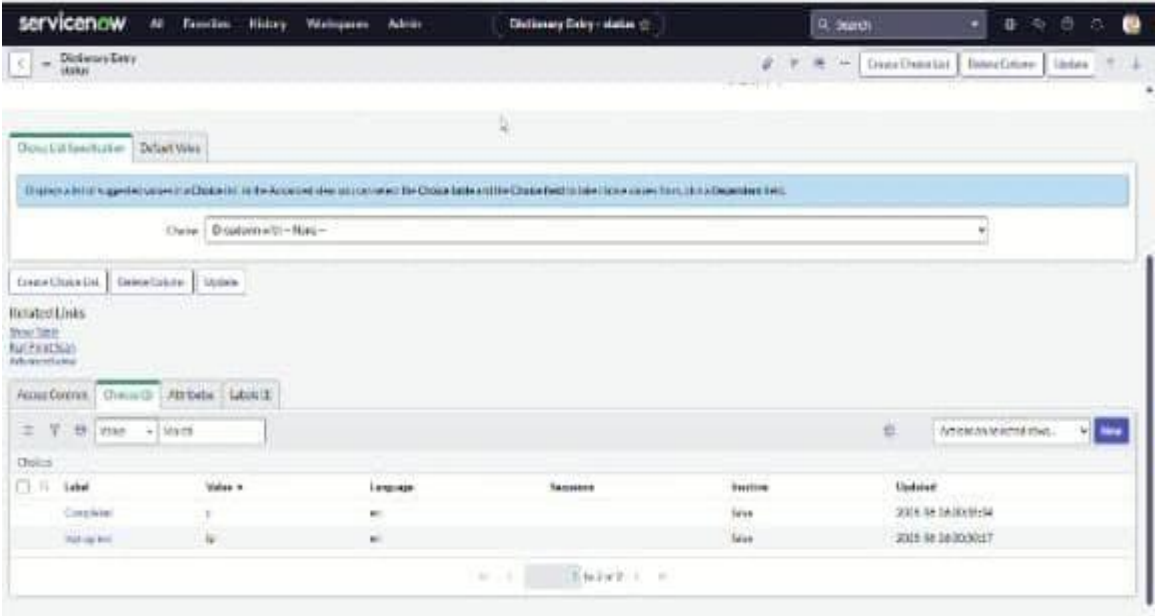
- 1.Open service now
- 2.Click on all >>search for tables

5.Fill the following details to create a new table

10. Employee (type : reference),(reference field to system user table)

11. Click on submit

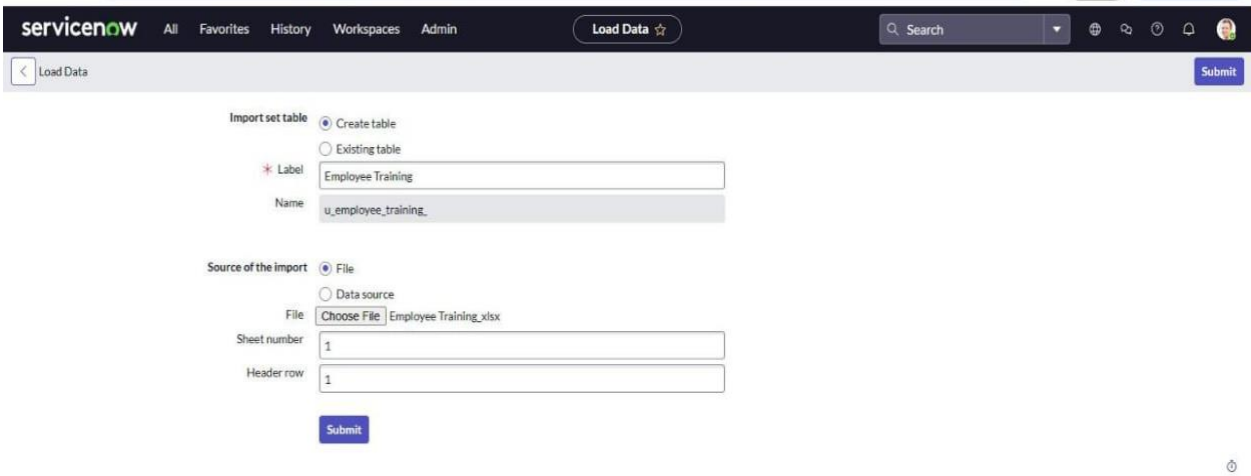
12. Click on choice and add to choices in the dictionary entry status



Milestone 2: import data

Steps

- 1. Open service now
- 2. Click on all > >search for system import s Select
- 3. Select load data and upload file that you have already created with four fields that are: (training name, completion date, status and employee)
- 4. Label: employee training
- 5. Name: u_employee_training



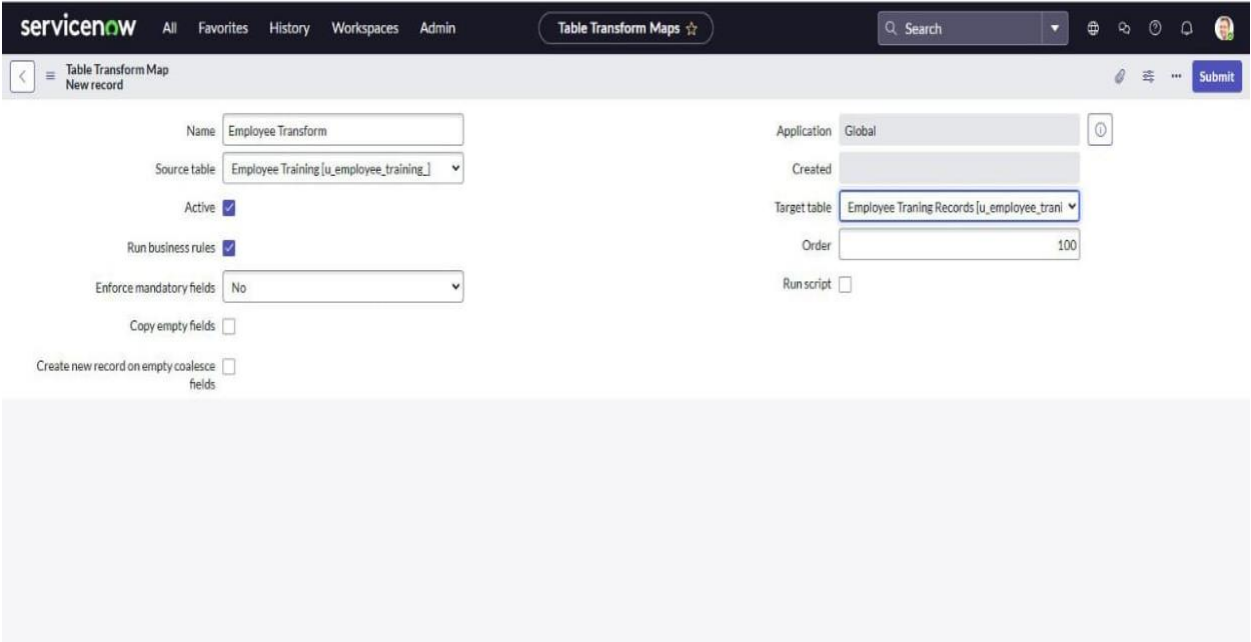
6. Click to submit

MAP FIELDS:



Steps:

- 1.Open service now
- 2.Click on all > > search for Transform maps
- 3.Fill the following details to create a new table



- 4. click on submit
- 5.add field maps as shown
- 6.click transform to run the import

servicenow

AllFavoritesHistoryWorkspaces

Table Transform Map - Employee Transform

Search

Table Transform MapEmployee Transform

Create new record on empty coalesce fields

CopyUpdateDelete

Related Links

[Auto Map Matching Fields](#)[Mapaine Assist](#)[Validate Coalesce Fields](#)[Transform](#)[Index Coalesce Fields](#)[Run Point Scan](#)

Field Maps (4)Transform ScriptsEmpty reference fields (1)

Actions on selected rows...

New

	Source field	Target field	Coalesce
	u_training_name	u_training_name	false
	u_completion_date	u_completion_date	false
	u_status	u_status	false
	u_employee	u_employee	false

1 to 4 of 4

7. Click transform to run the import

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ServiceNow

Search

Progress

Name

Transforming: ISET0010001

State

Complete

Completion code

Success

Message

Transformation complete

Next steps...

ISET0010001

Go to the import sets for this data load

Transform history

Show the transform history, related errors and log

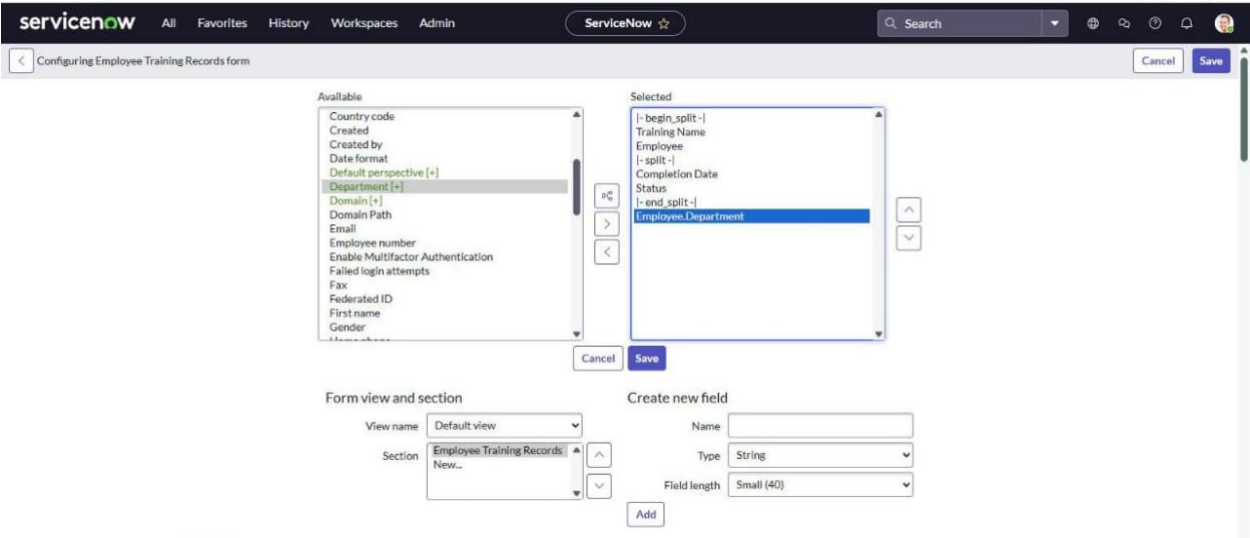
Import log

View the import log

Milestone 3: using dot walking to access employee department information

Steps:

- 1.Open service now
- 2.Click on all >> system definition >>list layouts
- 3.Search for customer orders
- 4.Add the employee department field by using dot walking
- 5.Select the field and save changes



Milestone 4:Access control list (ACL)

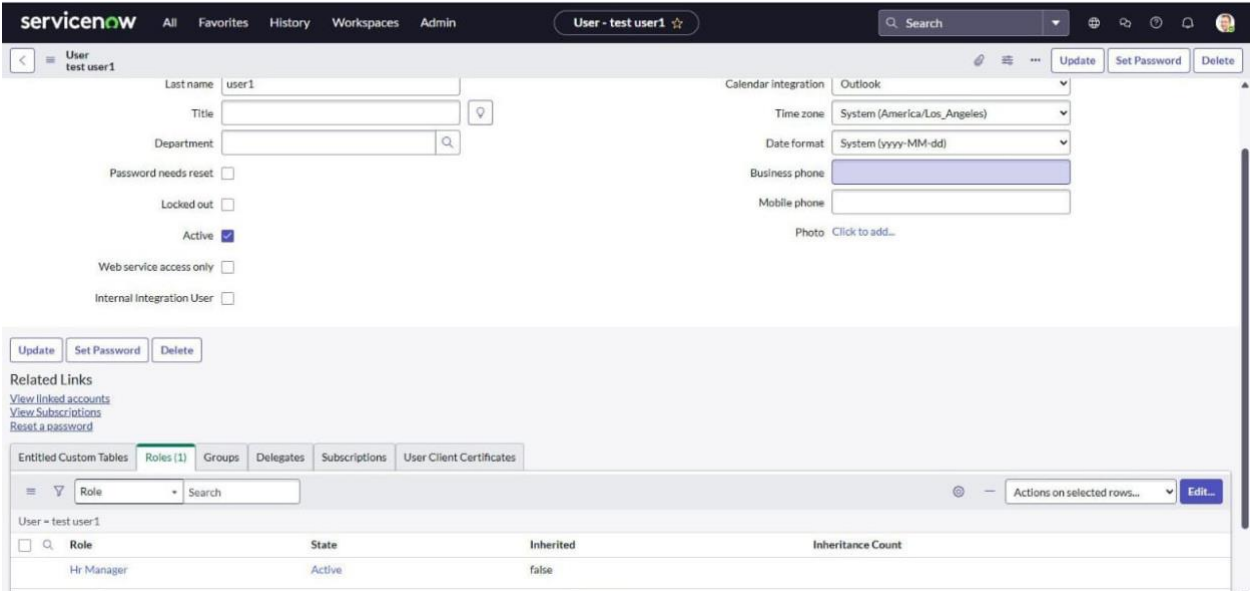
Steps:

- 1.Open service now
- 2.Click on all>>ACL>>create new ACL
- 3.Define ACL (Employees)
- 4. Operation: Read

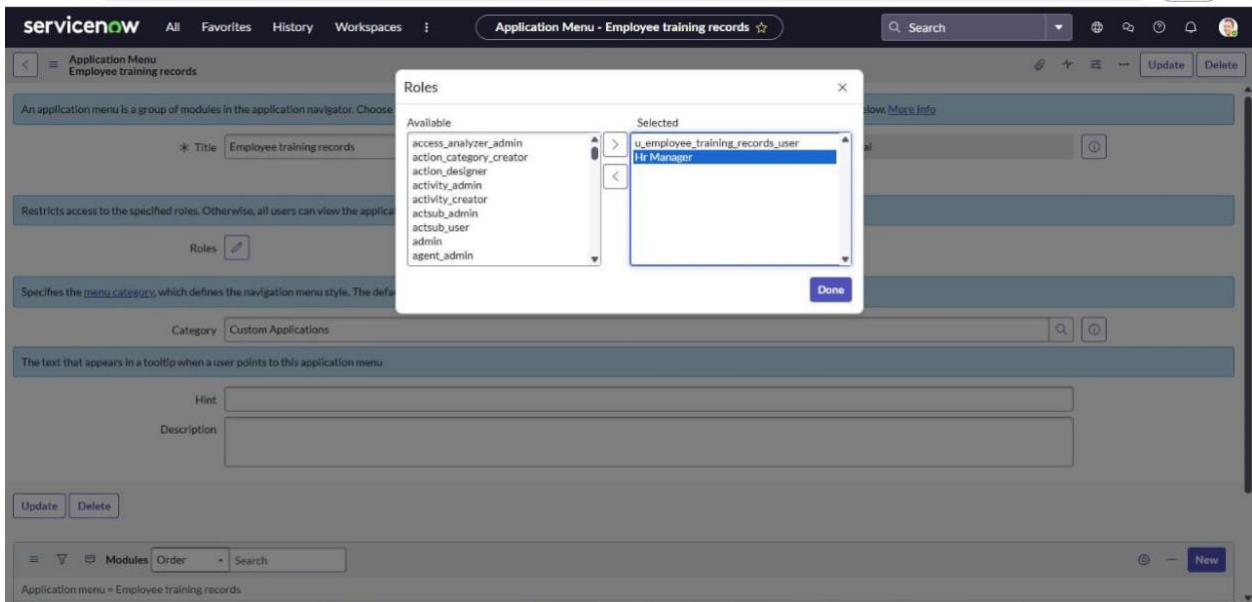
Milestone 5: Roles

Steps:

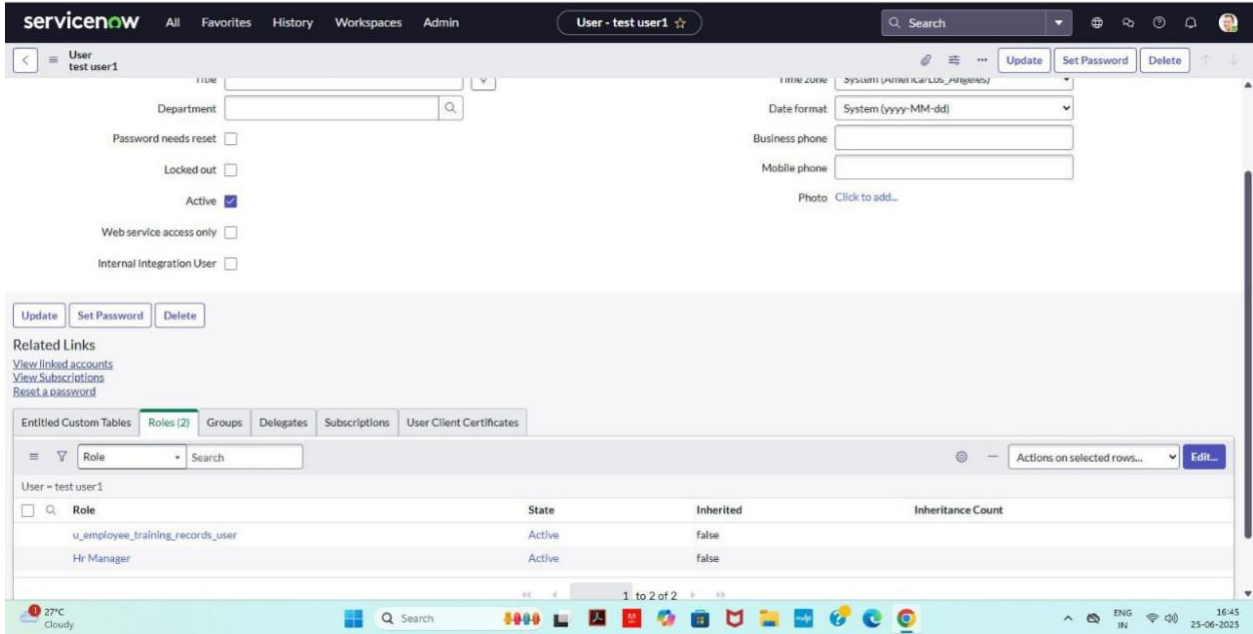
- 1.Open service now
- 2.Click on all>>roles>>create a new role:Hr manager
- 3.Add in the sys_user



4. Add this roll to the tables application and module



5. At the HR manager role to the sys_user



6. Now you can view each employees department information directly in the employee training records list view

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AllFavoritesHistoryWorkspacesAdmin

Employee Training Records

Search

Search

Actions on selected rows...

New

All

Completion Date	Employee	Status	Training Name	Department
Search	Search	Search	Search	Search
(empty)	(empty)			(empty)
(empty)	(empty)			(empty)
(empty)	Abel Tutor	Inprogress	Full Stack Java	Product Management

UPDATE TO ELEVATE ROLE :

Steps :

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Access Controls

Search

Search

System Administra...
System Administrator
ServiceNow

Profile
Preferences
Keyboard shortcuts
Impersonate user
Elevate role
Printer friendly version
Log out

All

Name	Decision Type	Operation	Type	Active	Updated by
Search	Search	Search	Search	Search	Search
\$allappsmgmt	Allow If	read	ui_page	true	admin
\$atf_page_inspector	Allow If				admin
\$conversation-builder	Allow If				admin
\$mycompanyappsmgmt	Allow If				admin
\$ng_fd_sc	Allow If				admin
\$oc_calendar_launcher_redirect	Allow If				admin
\$products	Allow If				admin
\$pwd_reset_serviceDesk	Allow If				admin
\$sa_service_model_json	Allow If				admin
\$sia_timeline	Allow If				admin
\$sn-via-web-client-app	Allow If				admin
\$sn_global_search_results	Allow If	read	ui_page	true	admin
\$epd	Allow If	read	ui_page	true	admin
\$spn_availability_calculation_setting	Allow If	read	ui_page	true	admin
\$studio	Allow If	read	ui_page	true	admin
\$upgrade_client	Allow If	read	ui_page	true	admin
\$upgrade_monitor	Allow If	read	ui_page	true	admin

Elevate role

Elevate a role by adding privileges, which end when you log out. Learn more

AVAILABLE ROLES

☒ security_admin

Grant modification access to High Security Settings, allow user to modify the Access Control List

CancelUpdate

1 to 20 of 28,980

1. Create new ACL and give read access to employee training record table

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AllFavoritesHistoryWorkspaces

Access Control - u_employee_training_records

Search

UpdateDelete

* Type

record

* Operation

read

Decision Type

Allow If

Admin overrides

☒

Protection policy

-- None --

* Name

Employee Training Records [u_employee_training_records]

Description

Allow read four records in u_employee_training_records,for users with role Hr Manager.

Applies To

No. of records matching the condition: 3

Add Filter Condition

Add OR Clause

-- choose field --

-- oper --

-- value --

Application

Global

Active

☒

Advanced

☐

Conditions

Access Control Rules have two decision types, and these types will behave differently depending on conditions.
1. Allow Access: Allows access to a resource if all conditions are met. Additional ACLs may grant access to records where this ACL has not granted access.
2. Deny Access: Denies access to a resource unless all conditions are met. Additional ACLs may not grant access to records where this ACL has denied access.
[More Info](#)

2. Give HR manager role to the ACL
3. Create another new ACL and repeat the same process to the write access

Milestone 6: result

Steps :

1. Impersonate the sys_user and search employee training records
2. Now you can see and edit the field

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AllFavoritesHistoryProcess Mining Workspace

Employee Training Records

Completion Date

Search

Actions on selected rows...New

Completion Date	Employee	Status	Training Name	Department
(empty)	(empty)			(empty)
(empty)	(empty)			(empty)
(empty)	Abel Tutur	Inprogress	Full Stack Java	Product Management

- 3.Impersonate the other user you cannot see the table

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AllFavoritesHistoryProcess Mining Workspace

ServiceNow

employee

FAVORITES

No Results

ALL RESULTS

Self-Service

Employee Center

Creator Studio

Create request-based apps quickly

A guided and curated environment for creating forms and assigning automations to them. No-code required.

Open Creator Studio

GO FURTHER

Power your workflow applications

PROJECT PLANNING AND SCHEDULING

Table.	Create. Tables.	1	Pattika yulangasami
Import Data	importing data.	1.	Pattika yulangasami
Import Data	map. Fields.	1.	Savara Geetha
Using Dot Walking Access Employee Department	Dot walking.	1.	Savara. Geetha
Access control List	creating an ACL	1.	Savara. Liyani
Roles.	Create role.	1.	Savara. Liyani
Roles.	Update to relevant.	1.	Savara Hemalatha
Result.	Testing results	1.	Savara Hemalatha

ADVANTAGES & DISADVANTAGES

Advantages

Ensures accurate data import and reduces errors.

Protects sensitive data from unauthorized access.

Helps meet regulatory requirements and industry standards.

Maintains data consistency and completeness.

Streamlines data import and management processes.

Minimizes risks associated with data breaches or unauthorized access.

Disadvantages

Importing and securing data can be a complex process, requiring specialized knowledge and expertise.

The process can be time-consuming, especially for large datasets or complex security configuration.

Importing and securing data may require significant resources, including personnel, infrastructure, and technology.

Errors during the import process can lead to data inconsistencies or security vulnerabilities. Implementing robust security measures and importing data can incur additional costs, such as licensing fees or consulting services.

CONCLUSION:

The importing and securing Data in service now project demonstrated the essential process of importing data into Service Now using Import Sets, leveraging dot-walking to access and utilize related table data efficiently, and applying Access Control Rules (ACLs) to enforce robust data security. By combining these core functionalities, we ensured accurate data integration, streamlined data relationships, and protected sensitive information through role-based access control abilities.

